



***Drumlanrig Roman Fort
Drumlanrig Castle, Dumfries & Galloway***
Archaeological Evaluation & Assessment of the Results



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**DRUMLANRIG ROMAN FORT,
DRUMLANRIG CASTLE, DUMFRIES AND GALLOWAY**

**ARCHAEOLOGICAL EVALUATION
AND ASSESSMENT OF THE RESULTS**

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ARCHAEOLOGICAL EVALUATION AND ASSESSMENT OF THE RESULTS

Summary

Wessex Archaeology was commissioned by Videotext Communications Ltd to carry out archaeological recording and post-excavation analysis on an archaeological evaluation by Channel 4's 'Time Team' at the site of a Roman fort at Drumlanrig Castle, Dumfries and Galloway (centred on NGR 285400 598900). The fort, whose ditches and street plan were identified from parch marks in 1984, covers some 1.8ha on a plateau overlooking the River Nith, with a possible ditched annexe on lower ground to the north-east.

The archaeological evaluation aimed to establish the date of the fort, which could have been used during the Flavian (AD 79-83) and/or Antonine (AD 140s-170s) campaigns. It also sought to provide further information about its layout and extent, and if possible about the size and composition of the military regiment stationed there. The results would inform the future management strategies for this part of the Drumlanrig estate. The work, which was carried out from 9-11th June 2004, included a geophysical survey of the site and twelve evaluation trenches.

The geophysical surveys consisted of 1ha of resistance survey within the fort interior, and 3.4ha of detailed gradiometer survey which included the area of the annexe. It confirmed the 'playing card' shape of the fort's bank and ditch defences, demonstrated a close relationship between the fort and the annexe and provided details of the street plan and the main blocks of building, with the locations of barrack blocks and the *principia* (headquarters building) being clearly identified. The results of the survey were used to identify suitable locations for the evaluation trenches.

A single 22m long trench was excavated across the innermost portion of the defences on the north-east side, and a further five small trenches were excavated at various locations across the front part of the fort (the *praetentura*), which comprised the north-western two-thirds of the fort. The remaining six trenches were excavated in the area of the *principia*. The defences trench revealed a wide V-shaped ditch and a turf rampart with stone foundations at the front and possibly to the rear. Within the fort, the trenches revealed beam slots, possible postholes, stone walls (some robbed) and floor surfaces associated with a number of buildings, including the *principia*, and metal surfaces representing the edges of some of the streets. A stone-lined feature was tentatively interpreted as a water trough or cistern.

The size of the fort suggests that part of the auxiliary regiment may have been stationed in nearby fortlets, and there were hints that the troops included a cavalry component. All the finds recovered were Antonine in date, suggesting that the structures excavated were built and in use in the Antonine period. No evidence for an earlier, Flavian phase of occupation was identified, although the excavations undertaken were limited in scale and subject to significant time constraints. However, the excavations undertaken on the *principia* revealed evidence for two phases of

activity, the lowest of which was not fully explored, and the possibility of an earlier phase of rampart construction cannot be ruled out. The abandonment of the fort appears to have been preceded by its deliberate destruction, involving the demolition and burning of structures, and the slighting of the rampart.

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Thanks also go to the Roman specialists who were involved as part of the project, including Allan Wilson, Gordon Maxwell, Tony Willmott and Colin Wallace, who also analysed the pottery. Surveying was undertaken by Henry Chapman, University of Hull, and the geophysical survey was undertaken by GSB Prospection.

On site recording and co-ordination was undertaken by Catriona Gibson. The archive was collated and all post-excavation assessment and analysis undertaken by Wessex Archaeology including management (Nick Cooke), finds (Steve Thompson), environmental assessment (Chris Stevens), report (Andrew Powell), and illustrations (Matthew McMurray).

Glossary of Roman terms (see Fig. 2)

<i>Latera praetorii</i>	The central range of a Roman fort containing the <i>principia</i> , the <i>praetorium</i> and other important buildings.
<i>Praetentura</i>	The front part of the fort, between the <i>via principalis</i> and the <i>porta praetoria</i> , and bisected by the <i>via praetoria</i> , generally filled with the tents or barrack blocks of the garrison.
<i>Praetorium</i>	Commander's house: because of the commander's status a large area was set aside for his personal residence usually adjacent to the <i>principia</i> , and often featuring a central courtyard.
<i>Principia</i>	Headquarters building: the administrative and religious centre of the fort, fronting onto the <i>via principalis</i> and facing down the <i>via praetoria</i> . It consisted of three parts: a gravel-surfaced or paved, colonnaded courtyard, a cross-hall (the <i>basilica</i>) and a rear range of usually five rooms, the central of which (the <i>sacellum</i>) housed the regimental standards and treasury.
<i>Retentura</i>	The rear part of the fort lying between the <i>via quintana</i> and the rear gate (<i>porta decumana</i>). This area was sometimes omitted in the smaller forts, especially if there was no rear gate.
<i>Via praetoria</i>	The street branching off at right-angles from the centre of the <i>via principalis</i> in front of the entrance to the <i>principia</i> , and bisecting the <i>praetentura</i> leading to the front gate (<i>porta praetoria</i>).
<i>Via principalis</i>	The street lying across the shorter axis of the fort, passing in front of the <i>principia</i> .
<i>Via quintana</i>	The street running behind the <i>principia</i> , between the <i>latera praetorii</i> and the <i>retentura</i> .
<i>Via sagularis</i>	The intervallum street running around the perimeter of the fort inside the rampart, enclosing the buildings in the interior.
<i>Viae vicinariae</i>	Minor roads running between the barracks, stables, granaries and other buildings in the fort interior.

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ARCHAEOLOGICAL EVALUATION AND ASSESSMENT OF THE RESULTS

1 INTRODUCTION

1.1 Description of the site

1.1.1 Wessex Archaeology was commissioned by Videotext Communications Ltd to undertake a programme of archaeological recording and post-excavation analysis on an archaeological evaluation by Channel 4's 'Time Team' at the site of a Roman fort at Drumlanrig Castle, Dumfries and Galloway. The evaluation was undertaken in order to inform the future management and interpretation of the site.

1.1.2 The site, some 25 kilometres north-north-west of Dumfries, covers *c.* 1.8 hectares centred on NGR 285400 598900 (**Fig. 1**). It occupies a mostly level grass plateau at 75-77m aOD, between the River Nith and the Marr burn, near their confluence, the ground falling away quite steeply to the south and west.

1.1.3 The geology of the site is a combination of Glacial Meltwater Deposits, Llandovery and Middle Coal Measures (BGS Scotland sheet 15 (E) and 9 (E) Solid and Drift).

1.2 Archaeological and historical background

1.2.1 The presence of a Roman fort was indicated by parch-marks visible in air photographs taken by the Royal Commission on Ancient and Historical Monuments of Scotland (RCAHMS) during a drought in the summer of 1984 (Frere 1985; Maxwell and Wilson 1987, fig. 5). Further aerial reconnaissance was undertaken in 1997 (Keppie 1998).

1.2.2 The fort, which has a typical 'playing card' shape (rectangular with rounded corners), measures at least 150m by 120m, its long axis aligned approximately to the north-west. The air photographs revealed elements of its internal street plan defining blocks of buildings arranged transversely in the north-western part of the fort. They also revealed a complex ditch system, with up to five parallel ditches to the north-east. On lower lying ground further to the north-east, a number of ditches indicated the presence of a possible annexe. The site has been subject to only limited ploughing in the past and the sections of the fort's defences remain visible as a low (0.4m) broad bank on the south edge of the plateau and the hollow of a ditch at the south-west corner.

1.2.3 No previous archaeological excavation has been undertaken on the site. However, a sherd of Roman grey ware was discovered adjacent to it during the construction of an adventure playground in 2002, and two sherds of 2nd

century decorated samian (not traced) were found in 1985 in a riverside field at the west end of the fort (Newall and Lonie 1995, 101). There was a series of other enclosures nearby, including Roman temporary camps, one immediately to the south east of the fort, another on the opposite side of the River Nith, and a third at Carronbridge, 2km to the south-east (Wilson 2003, 35, Johnston 1995), and other forts and fortlets linked by a Roman road are known at Durisdeer to the north and Barburgh Mill, Dalswinton and Carzield to the south (**Fig. 1**).

1.2.4 A branch of the Roman road probably crossed the Nith at Drumlanrig and proceeded into Upper Nithsdale, running past the fortlet at Sanquhar and thence on to the Ayrshire coast. The position of the fort at Drumlanrig on the west bank of the Nith suggests that one of the main functions of the garrison here was to protect the traffic along the southern portion of this road; such a requirement may have arisen during the Antonine occupation in the second century, but it is less likely than a first century origin (Maxwell, pers comm.). The Roman road running north east past the Roman fortlet and through the Flavian marching camp at Durisdeer probably acted as a link road to the Roman fort at Crawford in Upper Clydesdale, which was certainly occupied in the late first century AD.

1.2.5 Although, Hadrian's Wall, built in the early AD 120s between the Tyne and the Solway, became established as the effective northern boundary of the Roman occupation in Britain, there were attempts both before and after to extend and consolidate that occupation into Scotland (Keppie 1986). The Roman fort at Carlisle has been dated by dendrochronology to AD 72/3, and probably acted as a base for Q Petillius Cerealis for campaigns in Scotland in those years (Wilson 2003, 114). In AD 79-80, during the period of the Flavian dynasty, campaigns by Cnaeus Julius Agricola, the Roman Governor, established short-term military control across lowland Scotland establishing forts along the Forth-Clyde line. By AD 83 he had reached as far north as the Moray Firth.

1.2.6 Later, during the AD 140s, on the orders of the emperor Antoninus Pius, a new boundary wall was built running between the Clyde and the Forth. However, by the early AD 170s, the forts along this Antonine Wall, and others along the supply routes from the south, some of which had first been occupied during Agricola's campaigns, had been abandoned as the Roman army withdrew to Hadrian's Wall. Further campaigns north of the Tyne-Solway were undertaken by the emperor Severus in AD 208-211.

2 METHODS

2.1 Introduction

2.1.1 A project design for the work was compiled by Videotext Communications (Videotext Communications 2004), providing full details of the circumstances and methods of the project, as summarised here.

2.2 Aims and objectives

- 2.2.1 The main aim of this project was to understand the origins, development and abandonment of the Roman fort. The evaluation sought to identify when it was established and whether there was more than one phase of construction or use. Determining its dates would allow it to be placed within the historical context of the various Roman campaigns in Scotland. Because the fort occupies a strategic position in Nithsdale, one of the main communication routes through south-west Scotland, it is possible that it may have been first established during the campaigns of Agricola.
- 2.2.2 It was also hoped to gain a greater understanding of the extent and layout of the fort, and in particular, any internal sub-divisions and structures that might help to establish the type of military unit stationed there.
- 2.2.3 The results of this work will be used to inform future management strategies for the land concerned, including determining where trees can be planted in this part of the Drumlanrig estate without damaging the archaeology.

2.3 Fieldwork methodology

- 2.3.1 A geophysical survey of the site was undertaken by GSB Prospection Ltd, comprising approximately 3.4ha of detailed gradiometer survey and 1ha of resistance survey. The aim was to provide further information about the form and layout of the fort, and to help identify targets where evaluation trenches might seek to answer specific questions. The gradiometer survey was extended to the lower lying ground north-east of the fort, where parch marks had revealed a possible annexe.
- 2.3.2 Twelve evaluation trenches of varying size were excavated over geophysical anomalies that suggested the presence of defences, buildings and other internal features within the fort (**Fig. 2**). The larger trenches (Trenches 1, 5, 8, 9, 10 and 12) were opened with a mechanical excavator using a toothless ditching bucket, the rest being deturfed and opened by hand. All machine work was undertaken under constant archaeological supervision and ceased at the identification of significant archaeological deposits. The exception was the defensive ditch in Trench 1 (below), where the lower fills, due to their depth below the ground surface, were machine excavated. All spoil was scanned by metal detector.
- 2.3.3 All trenches were then cleaned by hand and archaeological deposits were excavated. Four bulk environmental samples (between 2 and 10 litres) were taken from a range of feature types. The deposits were recorded using Wessex Archaeology's *pro forma* record sheets, and drawn at a scale of 1:20 for plans and 1:10 for sections. A photographic record was kept of the investigations and of individual features. The trenches were located using a GPS survey system, and the principal contexts were related to Ordnance Survey datum.
- 2.3.4 The work was carried out from 9-11th June 2004, following which all trenches were reinstated using the excavated spoil, and the turf re-laid or replaced. All artefacts were transported to the offices of Wessex Archaeology at Salisbury where they were processed and assessed.

3 RESULTS

3.1 Introduction

3.1.1 Details of individual excavated contexts and features, the full geophysical report (GSBP 2004) and results of artefact and environmental sample analyses are retained in the archive.

3.2 Geophysical survey

3.2.1 The geophysical survey data provide a more detailed picture of the internal layout of the fort than that revealed in the air photographs, as well as a better indication of its dimensions (**Fig. 2**). The gradiometer survey confirmed the 'playing card' shape of the bank and ditch defences, with breaks along the north-east and south-west sides and midway along the north-west end.

3.2.2 Much of the street plan was revealed by both the gradiometer and resistance data (GSBP 2004, fig. 4). It includes the *via principalis*, linking the two side entrances and dividing the forward part of the fort (the *praetentura*) from the rear. The *praetentura* was subdivided by a further two parallel streets (*viae vicinariae*), and was bisected by the *via praetoria* running from the entrance at the north-west, so defining six insulae (blocks) of internal buildings, most of them probably barracks (numbered here I-VI, clockwise from the north, to aid identification) (**Fig. 2**).

3.2.3 The configuration of streets and buildings in the south-eastern part of the fort was less clear, although the location of the *principia* (the headquarters building) is relatively clearly indicated, subdivided by a wall probably marking the front of the *basilica*. Possible streets are suggested (GSBP 2004, fig. 4), as are numerous blocks of buildings, although not all are easy to identify from the plan alone. These buildings normally included a *praetorium*, either in the central range of the fort (the *latera praetorii*), or in the rear part of the fort (the *retentura*). The *retentura* was sometimes omitted in smaller forts, especially if they had no rear gate, and although a linear feature running from behind the *principia* towards the position of the rear gate may mark the line of the *via decumana*, there appeared to be no obvious break in the defences at that point. However, natural erosion makes it difficult to be certain.

3.2.4 A group of gradiometer anomalies outside the defences, to the north-east, are on the same alignment as the fort, and are therefore likely to be associated with it, possibly indicating part of an annexe surrounded by a ditch. There were numerous other anomalies inside and outside the main defences, some indicating possible walls, other which are likely to be pits or less well defined timber beam slots.

3.3 Evaluation trenches

3.3.1 All of the trenches contained archaeological deposits, features or finds. A stony layer recorded below the topsoil in a number of trenches was initially

identified as a deliberate surface. However, in a number of cases this is more likely to represent a naturally sorted horizon within the topsoil/ploughsoil.

Trench 1

- 3.3.2 Trench 1 was opened through the defences on the north-east side of the fort (**Fig. 3**). It was 22m long and 1.6m wide (increased to 3.2m wide adjacent to the ditch to create a step for safety reasons). The ditch, on the outside, was approximately 7m wide and 3m deep. Its lower levels were excavated by machine, and although its sides and base were not fully defined it was V-shaped in profile. There were no indications that it had been recut.
- 3.3.3 Its earliest fill (105) consisted a slumped layer of stony soil lying against the outer side. Overlying 105 and filling the base of the ditch to a depth of *c.* 0.7m was a dark grey brown silt loam (106), in the top of which was a deposit of loose stony soil (104), either a collapse or dump of material deriving from the rampart side. Above them, a period of relatively rapid silting is suggested by a poorly sorted layer of dark red brown silty clay (116). The overlying four layers (114, 107, 103 and 102) represent the gradual slowing and stabilisation of the silting process, although layer 107, which produced four sherds of Roman pottery and fragments of fired clay, appears to have derived largely from the outside. Layer 103 produced a small square-sectioned iron bar.
- 3.3.4 The rampart was set back approximately 2.6m from the inner edge of the ditch. It consisted of an earth and turf rampart, in the upper levels of which, towards the front, individual turves were still recognisable (109); in the lower levels (129 and 128) these were more highly degraded and less visible. The outer edge of the bank was defined by a dry-stone foundation or kerb (110), *c.* 0.5m wide, surviving to up to two courses (only one course visible in section).
- 3.3.5 A layer of earth containing fragments of turves (113), abutting the front of the bank (and overlain by upper ditch fill 103) probably represents bank material that had either slumped forward, or been levelled, towards the ditch. Cut into this layer, there were two parallel horizontal slots (133 and 135), 1.8m apart, running towards the rampart from near the edge of the ditch. Slot 133 was 3.4m long and 0.4m wide, and filled with a dark brown soil (134). Their nature is not clear – they may simply have been natural animal burrows.
- 3.3.6 The rear of the rampart was probably marked by a stone setting (120), *c.* 0.6m wide. It was some 8m behind the front face, and survived as two rough courses of stones and cobbles. Behind it was an area of burning with charcoal and burnt clay inclusions in the soil (117), and producing a large iron nail. Initially thought to be an oven, it is probably related to a general burning horizon that is widespread across the fort. This soil was bulk sampled for environmental analysis, and included wood charcoal and elements of possible scrub or local vegetation.
- 3.3.7 There was a loose linear spread of stones and cobbles at the inner end of the trench (layers 115, 122 and 125), which may represent another collapsed

kerb. Layer 115 produced three pottery sherds of broadly Antonine date (mid 2nd century AD), including a South-east Dorset Black Burnished ware (BB1) flat-rim bowl, as well as a fragment of blue/green vessel glass, a curved iron blade possibly from a sickle/scythe, three nails and fragments of burnt clay.

- 3.3.8 Topsoil layers 102 and 127 produced two sherds of Roman pottery, further fired clay, a nail and a fragment of animal bone.

Interpretation

- 3.3.9 The Antonine defences revealed in the trench comprise a wide V-shaped ditch separated from the stone kerbed face of the rampart by a 2.6m wide berm. The earth and turf built rampart was *c.* 8m wide, its rear face marked by a similar stone kerb, and therefore of similar dimensions and structure to the Antonine rampart at Crawford (Maxwell 1974, 151-3). The layers below the earth and turf body of the rampart were not excavated, but at Crawford these overlay a stone foundation layer at the front and rear.

- 3.3.10 There was some evidence to suggest two phases of construction in the rampart. This probably took the form of a rebuilding of the rampart's outer face. Layers 115, 122 and 125 probably represented the collapsed kerb of this rampart. A similar sequence was identified in some sections of the Antonine II rampart at Crawford (Wilson, pers. comm.). It is not clear whether this later phase of defensive works extended to cleaning or re-cutting the ditch. There is no obvious evidence for such an act, although a later ditch cut could have completely erased the evidence for a defensive ditch within the trench accompanying an earlier rampart. Four sherds of Roman pottery were found in the upper secondary ditch fill (107) –these may be residual (incorporated during later ploughing).

- 3.3.11 It is possible that the loose rubble at the inner end of the trench represents the remains of an intervallum road (*via sagularis*), immediately inside the defences. Alternatively, it may be material derived from the rampart's inner kerb and foundation, or from the foundations of buildings within the adjacent block II. Certainly the evidence of burning behind the rampart is on balance more likely to reflect a process of deliberate destruction of the fort's internal structures and defences at the time of its abandonment.

Trench 2

- 3.3.12 Trench 2, measuring 2m by 2m, was excavated in the western corner of block III. The earliest archaeological layer exposed (but not fully excavated) was a 0.15m thick layer of mottled dark brown black silty clay (212) containing large amounts of burnt clay and charcoal, lying across the test pit. This contained the large fragment from a circular quern stone (not retained).

- 3.3.13 Layer 212 was cut by a shallow linear feature (210), at least 0.7m long and 0.25m wide running approximately north-east/south-west, and filled with mid brown silty clay (211). This was truncated at the north-east by a 0.4m deep pit (208), which was at least 0.8m wide but extended beyond the test pit. The pit contained a mid yellow brown soil with charcoal fragments (209) and produced four joining sherds (burnt) of a BB1 triangular bead-rim dish

(Exeter Type 51), of Antonine date. The other end of the linear feature was not traced beyond a 0.4m sondage cut diagonally across the test pit.

- 3.3.14 Two circular cuts (213 and 215), both *c.* 0.3m in diameter and *c.* 0.6m apart, were recorded in the base of the sondage. It is unclear whether these features, possibly postholes, cut through layer 212 or were sealed by it. All these contexts, however, were sealed by a further 0.22m thick layer of charcoal-rich soil (204) containing burnt clay, which covered the test pit below the topsoil/ploughsoil layers. This contained two sherds of Roman pottery (one possibly from a mortarium), a copper alloy coin of 1st or 2nd century AD date, as well as further nails, a piece of iron plate, ceramic building material (CBM) and fired clay. This layer was sampled for environmental analysis and included wood charcoal, as well as seeds of broad bean, beetroot, hulled barley and oats.
- 3.3.15 The topsoil/ploughsoil layers (201-203) produced five sherds of Roman pottery (including two of Central Gaulish samian [form 18/31]), a slab of sandstone building material, three pieces of undiagnostic CBM, nine nails and burnt clay.

Interpretation

- 3.3.16 These rather ambiguous features suggest some activity on the corner of this probable barrack block. However, although the linear feature ran perpendicular to the *via praetoria*, it was insufficiently clear to allow any reliable interpretation as a beam slot and would seem to have been too small to have had any other significant structural function.
- 3.3.17 The nature of the activity may be reflected by the relatively high quantity of finds, and the plant remains. As beetroot seed would not have been eaten, the recovery of such a seed, along with beans and cereal grains may indicate the storage of seed for cultivation (in the case of beet either for roots and/or leaves) rather than indicating a cooking area, although not too much weight should be placed on a single seed.

Trench 3

- 3.3.18 Trench 3 was excavated near the north corner of block I in the hope of revealing evidence of defensive structures in the corner of the rampart. It was 4.8m long and 2m wide, aligned north/south. The earliest archaeological layer exposed (and partly excavated) was a dark greyish brown and charcoal-rich silty clay (306) up to 0.18m thick, covering the whole trench. Above this, in the southern corner of the trench, was a small dump of burnt material (305), 0.55m across and up to 0.22m thick.
- 3.3.19 Much of the northern two-thirds of the trench was covered by a spread of rubble (304) in an orange brown silty loam matrix. This produced two sherds of Antonine pottery (BB1 and South Spanish amphora) and a piece of slag. Within this spread there was a line of four large stones (303) running approximately north-east/south-west. Although none was obviously faced, their tops rose above the surface of the rubble and their arrangement suggests they formed part of some *in situ* structure.

- 3.3.20 The topsoil layers (301 and 302) produced further pottery, including BB1 and Local Traditional ware, CBM, slag, fired clay and a fragment of animal bone.

Interpretation

- 3.3.21 The line of stones, which appeared to be concentric with the curving defences at the northern corner of the fort, were set back some 7m from the geophysical anomaly indicating those defences. This is comparable to the distance between the stone setting at the rear of the rampart (120) of the rampart and the geophysical anomaly indicating the defences in Trench 1, and presumably they served the same purpose. As in Trench 1, the rubble layer appears to derive from adjacent structures.

Trench 4

- 3.3.22 Trench 4, measuring 2m by 2m, was excavated on the north-east side of the *via praetoria*, immediately inside the defences at the north-west end of the fort in the hope of uncovering evidence for a gateway structure associated with the *porta praetoria*.

- 3.3.23 At the base of the test pit there was a compact surface of small stones and cobbles (404) (not excavated) that sloped to the north-east, with a number of larger pieces of angular sandstone set within the layer before the break of slope. A small dump of cobbles (403) above the surface may represent a repair to the surface. The only find was a small piece of iron from the topsoil (401).

Interpretation

- 3.3.24 The cobbles appear to have formed the metalled surface of the *via praetoria*, the larger pieces of stone possibly marking the edge of the carriageway, beyond which it was cambered. The geophysical survey suggests the road was *c.* 6m wide.

Trench 5

- 3.3.25 Trench 5 was one of six trenches excavated in the area of the *principia* (the others were Trenches 8-12, below), located over a possible wall as indicated by the geophysical survey. It was 4.8m long and 1.8m wide aligned on the fort's long axis (**Fig. 4**). A 2.6m long and 0.7m wide sondage in the southern corner of the trench, excavated down to natural, revealed the possible *in situ* remains of a stone structure.

- 3.3.26 Within the sondage, a thin soil layer (516) above a clean fine gravel, possibly natural, was overlain by two layers, possibly for levelling. The lower layer (not visible in the section), was an uneven spread of dark reddish brown clay (515) up to 0.2m thick, containing charcoal and burnt clay possibly associated with construction activity, while the upper layer (512) contained numerous rounded cobbles. Layer (515) may represent the remains of an earlier floor surface. These were overlain by a floor comprising a layer of mortar (504 and 514) in which were bedded small pieces of flat sandstone. It is possible that this floor was cut, as it does not appear continuous in section, and because it was exposed only within the sondage, its full extent within the trench was not ascertained. On top of it, however, as visible in the side of the

trench, there rested a large dressed rectangular stone (517), 0.87m long, 0.24m wide and 0.17m high, possibly a step, its upper surface appearing to have been worn down.

- 3.3.27 A second structural element was indicated by a dense and largely irregular grouping of stones (510) towards the north corner of the trench, approximately on the line of the possible wall indicated by the geophysical survey. Within these was a square arrangement of roughly shaped sandstone blocks (505), 0.67m across, defining a 0.3m wide square socket (519), probably designed to hold a squared timber post. Abutting the north side of the socket was a 0.1m thick deposit of stony orange clay (509), apparently deliberately laid.
- 3.3.28 The socket was filled with rubble (506), and there was a further spread of rubble (507) to its south, the latter producing the only finds from the trench – six nails and small piece of iron. The socket, and the rubble associated with it, as well as the clay deposit to the north and the floor surface at the south end of the trench, were all overlain by a thin layer of gravelly sandy silt (503). This, in turn, was overlain by layers containing fragmented sandstone and charcoal (508) then larger, faced pieces of stone (502).

Interpretation

- 3.3.29 The limited size, and only partial excavation, of the sondage makes it hard to interpret the mortar bedded floor and possible step, or their relationship to the stone post-socket. However, on the basis of the geophysical survey these would appear to relate to the forward part of the *principia* building, which typically may have consisted of a colonnaded courtyard in front of the *basilica*. The spread of rubble around the post socket, and the overlying stony layers indicate either the collapse and/or demolition of this part of the *principia* building.
- 3.3.30 The sondage also produced possible evidence for an earlier phase of construction or occupation in the form of layer (515), which may have been an earlier floor surface. Unfortunately, there was no opportunity to explore this possibility further.

Trench 6

- 3.3.31 Trench 6, measuring 4m by 1m and aligned north/south, was excavated in order to investigate a large rectangular negative magnetic anomaly (and area of low resistance) on the western corner of the *via praetoria* and the *via principalis*, in block IV.
- 3.3.32 The main feature within the trench was a line of stones (605) parallel to the *via principalis*, which was represented by a metalled surface of small cobbles at the southern end of the trench layer (604). The structure had a flat face on the north-west side, i.e. facing away from the road (**Fig. 5**), and it corresponds very closely to the position of the possible wall, as indicated by the geophysical survey. Only a single course was exposed, and the backs of the stones appeared to be set into a layer (not excavated) of reddish pink silty clay (606).

- 3.3.33 The lowest exposed layer in front of the stones consisted of mottled silty clay (608 – not excavated) suggestive of anaerobic organic decomposition, its surface sloping away from the stones. Above this, and abutting the stones, was a layer of pinkish orange silty clay, up to 0.45m thick (603) on top of which a section of the line of stones had collapsed (607).
- 3.3.34 The only find from this trench, a single sherd of BB1, was recovered from the upper topsoil (601).

Interpretation

- 3.3.35 The cobble layer represents the edge of the *via principalis*, so the stone structure would have been located right on the edge of the road, at its junction with the *via praetoria*. As it only had a flat face on the north-west side it is more likely to represent a stone lining for a sunken feature than a wall, and given the character of its lower fill, a possible interpretation is as a cistern or water trough.

Trench 7

- 3.3.36 Trench 7, measuring 2m by 1m, was excavated to investigate a geophysical anomaly indicating a possible fired/burnt response adjacent to a possible wall, some 10m west of Trench 6 in block IV, one of a series of four similar anomalies on the north-west side of the *via principalis*.
- 3.3.37 It revealed a stone wall (704) running perpendicular to the road, located within 2m of a possible wall as indicated by the geophysical survey (**Fig. 5**). It was 0.65m wide and was exposed for a length of 1.7m. The stones were bonded with a pinkish orange mortar-like material (706) and those on the north-east face were dressed. Three courses of wall, with a height of 0.32m were exposed but the base of the wall was not reached.
- 3.3.38 No cut for the wall was visible in the deposits that abutted it. Against the north-east face, these consisted of a 0.3m thick layer of brown silty clay (705) containing charcoal flecks, fragments of burnt clay and a fragment of possible sandstone tile, overlying a similar unexcavated layer (707) also containing charcoal. Abutting the other side was a 0.3m thick layer of light grey brown silty clay loam (703) containing two sherds of Roman pottery (BB1 and coarse grey ware), a piece of CBM and fragments of lead and iron. This overlay an unexcavated layer of mid brown silty clay (708).
- 3.3.39 The topsoil layers (701 and 702) produced three sherds of South Spanish amphora (plus two medieval sherds), and further fragments of lead and iron.

Interpretation

- 3.3.40 Because this stone structure lies at a right angle to the *via principalis*, it is possible that it formed an internal division within a large building in block IV. However, given the size, as indicated by the geophysical survey, of the adjacent structure in Trench 6, suggested to be a water trough, it may in fact have marked the north-east side of a smaller building.
- 3.3.41 Whether this substantial stone setting was the base of a stone wall, or merely the stone foundation for a timber-framed building, is unclear. In the Antonine

period it was usual for only the *principia*, *praetorium* (the commanding officer's house) and the granaries to be built of stone.

Trench 8

- 3.3.42 Trench 8, measuring 11.6m by 1.6m, was excavated over a possible wall line, as suggested by the geophysical survey, running along the back of the *principia*. The earliest archaeological deposits in the trench were a series of silt layers of varying colour (recorded as 814) that were only partly excavated. These were cut, as exposed in a 1.2m wide sondage towards the south-west end of the trench, by two beam slots, 0.4m apart, aligned parallel to the suggested wall line. The outer slot (810) was 0.3m wide, the inner (815) 0.4m, and both were 0.17m deep.
- 3.3.43 A third slot (812) crossed 810 and 815 at a right angle and continued beyond the sides of the trench. Only one side of this feature was exposed in the sondage, but it was over 0.4m wide and, at 0.23m, was slightly deeper than those it crossed. The stratigraphical relationship between these three features, however, was not established with any certainty, nor was it ascertained whether 810 and 815 continued on the other side of 815.
- 3.3.44 Slots 812 and 815 were filled a layer of burnt soil (819) containing fired clay, then all three slots were sealed by a spread of dark brown silt (809 and 813). This layer contained the largest assemblage of finds from the site, including 41 sherds of pottery of Antonine date (the majority of them from South Spanish Dressel 20 amphorae, but including BB1 and a piece of Central Gaulish samian [form 30]), as well as fired clay, slag, possible stone building material, CBM and nails. The layer was sampled for environmental analysis and, in addition to charred hazelnuts and weeds seeds, produced grains of spelt wheat, hulled barley and oats.
- 3.3.45 This material was overlain by a patchy and plough-damaged cobbled surface (804) with possible evidence of localised repairs (817 and 818). Towards the north-east end of the trench, this surface (as 803) rose slightly, and was more compact and complete.

Interpretation

- 3.3.46 Despite the length of the trench, interpretation is again hampered by the small size and incomplete excavation of the sondage. However, this was the only trench in the interior with reasonably secure evidence for more than one phase of construction activity, the beam slots in the sondage being sealed by a dump of rubbish which was in turn overlain by the possible cobbled surface. The recovery of cereal grains from the midden may indicate the proximity of the granaries.
- 3.3.47 The geophysical survey suggests that this surface may be part of the *via quintana* running behind the *principia*, although as noted above the configuration of streets and buildings in the *latera praetorii* is far from clear in comparison to the barrack blocks to the north-west.
- 3.3.48 At the north-east end of the trench the slope of this surface gave it the appearance of a road running across the trench, in which case it might appear

to represent an extension of the *via decumana*. This would seem to be confirmed by a similar surface in Trench 12, c. 4m to the north-west (below). If so, this would suggest that neither the beam slots nor the possible wall line indicated by the geophysical survey, were part of the *principia*, but some other structure to its rear. Alternatively, it may be that the *principia* was rebuilt on a different plan in the final phases as originally built was subsequently foreshortened.

Trench 9

3.3.49 Trench 9, which measured 7.3m by 1.5m, was located over a geophysical anomaly in the *principia*, immediately south-east of Trench 5.

3.3.50 Series of largely unexcavated contexts, forming bands of different width running across the trench, were recorded. At the south-east end of the trench a compact layer of rounded pebbles in a reddish brown gritty silt matrix (912) may represent the edge of a cobbled surface. It overlies a layer of light red brown gravel (911). Adjacent to 911, some 0.85m from the edge of the cobbled surface, there was a 0.8m wide band of mixed rubble and mortar (909), including a patch of apparently *in situ* mortar on the south-west side of the trench, possibly the remains of the floor of one of the rooms at the rear of the *principia* or the remains of a robbed out wall.

3.3.51 Beyond this layer there was a compact spread of clay (910) up to 0.9m wide, then a 0.35m wide band of grey brown silt clay (907), initially interpreted as the fill of a beam slot. All these layers were overlain by a 0.1m thick layer of rubble (914). The north-west part of the trench was not excavated to the same depth, so it was not possible to determine whether there was a similar series of layers there. Here, excavation stopped at the surface of a layer of pinkish brown silty clay (905) with a high mortar content, possibly a floor, which appeared to abut the suggested slot.

3.3.52 Evidence of burning on the surface of 905 probably derived from an overlying layer of dark brown silt (913), up to 0.2m thick, containing much charcoal and burnt clay. Cutting this at the north-west end of the trench was a 0.07m deep linear cut (903), at least 0.3m wide (but one side lying beyond the end of the trench). A possible robber trench, it contained pieces of shattered sandstone in a brown gritty sandy soil (904). The whole trench was then covered by a thick layer of rubble (902).

3.3.53 The only finds from the trench were two sherds of pottery of Antonine date (including one of Central Gaulish samian) and some nails, from the topsoil (901).

Interpretation

3.3.54 Interpretation is hampered by the fact that few of the contexts were excavated. However, they may relate to the *principia's* cross hall (*basilica*), or the suite of usually five rooms at the rear of the building. The width of the possible robbed wall trench certainly suggests the presence of a substantial stone wall, but the proximity of the narrower slot and the intervening strip of clay are less easy to interpret. A similar band of clay, on approximately the same line, was recorded 5m to the north-east in Trench 11. The upper layers

of rubble and burning probably relate to the demolition and destruction of the fort at the time of its abandonment.

Trench 10

- 3.3.55 Trench 10, measuring 2m by 2m, was excavated in the north-eastern half of the *principia*. The earliest exposed layer was a very compact pinkish brown silty clay (1005), comparable to the possible floor (905) in Trench 9 (above). It was recorded that this layer was cut by a 0.3m wide beam slot (1006) filled with a dark soil containing charcoal (1007), but the position and orientation of this unexcavated feature was not recorded.
- 3.3.56 Sealing these layers was a series of burnt layers (recorded together as 1002), some containing sandstone blocks and others consisting of concentrations of charcoal. They also produced two pieces of CBM, and a number of nails. These layers were cut, in turn, by a possible robber trench (1003), up to 0.55m wide aligned north-west/south-east, containing dark pinkish brown silty loam and fragments of sandstone (1004).
- 3.3.57 The topsoil (1001) produced four sherds of a BB1 flat-rim bowl of broadly Antonine date, and a copper alloy fitting.

Interpretation

- 3.3.58 The presence of a beam slot and a robbed wall trench clearly relate to the north-eastern side of the *principia*.

Trench 11

- 3.3.59 Trench 11, measuring 2m by 1.7 and aligned north/south, was excavated near the centre of the *principia*. Running diagonally across the trench (i.e. parallel to the *via principalis*) was a 0.9m wide and sharply defined band of yellow brown clay (1103), producing a piece of fired clay and a nail. Its surface was raised *c.* 0.1m above two layers of similar mid grey brown silty clay containing many small rounded pebbles that lay on either side – 1106 to the north-west and 1104 to the south-east. Together they produced a further three nails and a sherd of Roman pottery.
- 3.3.60 These layers, none of which were excavated, were overlain by a 0.4m thick layer of mid reddish brown silty clay (1102) containing a number of large angular sandstone blocks. A copper alloy terret (harness fitting) was recovered from the topsoil.

Interpretation

- 3.3.61 The clay band was the same width as, and on a similar line to, that recorded some 5m to the south-west in Trench 9. The layers on either side of it may, therefore, correspond to the suggested robbed wall trench and slot that bounded the band in Trench 9. These features may relate to the *basilica* or the suite of rooms at the rear of the *principia*.

Trench 12

- 3.3.62 Trench 12, measuring 3m by 1.6m, was excavated centrally within what appeared to be, from the geophysical survey, the rear of the *principia*, possibly in the area of the *sacellum*, the regimental chapel and strongroom.

Removal of the topsoil layers (1201 and 1202) exposed the remains of a compact surface of small stone cobbles in a brownish grey silty clay matrix (not excavated), sloping down quite steeply to the north-west.

Interpretation

- 3.3.63 This surface may represent a continuation of the cobbled surface (803) recorded 2m to the south-east in Trench 8. However, there is no evidence from the geophysical survey for a road surface in this location, and its nature remains unclear.

4 FINDS

- 4.1.1 Finds were recovered from all but Trench 12. They were cleaned (with the exception of the metalwork), and have been quantified by material type within each context (in archive), and summarised by trench (**Table 1**). They have been visually scanned to determine the range of types present, their condition, and their potential date range, and spot dates have been recorded for selected material types as appropriate. The iron and copper alloy objects were X-rayed to aid identification and to inform any future conservation requirements. The finds data are currently held on an Access database.

4.2 Pottery

By Colin Wallace

- 4.2.1 The pottery assemblage, although small, has affinities with those at other Antonine military sites in the region, such as Crawford (Maxwell 1974), Barburgh Mill (Breeze 1974), Carzield (Birley and Gillam 1947), Glenlochar (Richmond and St Joseph 1953) and Birrens (Robertson 1975). South-east Dorset BB1 kitchenwares, Central Gaulish samian tablewares and South Spanish olive-oil transport amphora sherds are all present, along with (presumably) more local grey and orange-coloured wares and a piece of coarse 'native' pottery. No Flavian pottery was recovered.
- 4.2.2 The largest group (including BB1, amphora and samian) came from the midden layer (809) above the beam slots in Trench 8. There was further Antonine material from the defences (Trench 1), from the *praetentura* (Trenches 2, 3, 6 and 7) and the *principia* area (Trenches 8, 9 and 10). The grey ware base found during construction of the adjacent adventure playground, and the two samian sherds round near the river, fit easily within the assemblage.
- 4.2.3 Two medieval sherds, in White Gritty ware, came from the Trench 7 topsoil.

4.3 Ceramic building material and fired clay

- 4.3.1 A small amount of CBM was recovered from Trenches 2, 3, 7 and 8; none is diagnostic, but given the date of the associated pottery most if not all is likely to be Roman.

4.3.2 Fired clay occurred in larger quantities. Again, none of this material is chronologically distinctive, but is likely be Roman. Most of it is relatively abraded, and some of the smaller fragments may indeed be heavily abraded and hence unrecognised CBM. The larger fragments, however (for example, from contexts 204, 705, 809 and 819) are in coarser, softer fired fabrics than the CBM, and sometimes retain one flattish surface. It is assumed that this material is of structural origin.

4.4 Stone

4.4.1 Two flat slabs of sandstone were recovered, from contexts 202 and 705, the latter being sufficiently thin to be a roof tile, and a small fragment from 809. A small fragment of possibly igneous rock from 705 was not obviously worked. A quern stone from Trench 2 was not examined.

4.5 Metalwork

4.5.1 The iron objects consist mostly of nails or other structural items, and are generally in a poor, corroded condition. A small rectangular fragment (40mm by 25mm) from context 204 was tentatively identified on site as a possible *lorica* plate (from armour), although the X-radiograph could not confirm this as no perforations were visible. The only other object identified is a curved blade fragment, possibly from a scythe or sickle, from context 115. None of these objects are chronologically distinctive but again are assumed to be Roman.

4.5.2 The only copper alloy finds were a 1st or 2nd century AD coin (in very poor condition) from context 204, a harness fitting from the Trench 11 topsoil, and an unidentified object from the Trench 10 topsoil.

4.5.3 Lead objects, from Trenches 1 and 7, are probably waste, although a flat, subrectangular piece from context 703 is of fairly regular shape and could have functioned as a weight (18g).

4.6 Other finds

4.6.1 Also found were a fragment of Roman blue-green vessel glass (from a vessel of uncertain form), three pieces of iron-working slag and three fragments of unidentified animal bone, two of them burnt.

4.7 Potential for further analysis

4.7.1 This small finds assemblage is of fairly limited potential for further analysis, since the datable finds – the Roman pottery – have already provided dating evidence for use of the fort. The pottery has been recorded to the *Ceramic archive level* set out in the national guidelines (SGRP 1994), and wares have been linked as far as possible with the National Roman Fabric Collection (Tomber and Dore 1998), demonstrating that this assemblage lends itself to useful comparison with other contemporary groups from North Britain.

- 4.7.2 Where appropriate, the metal objects (e.g. coin, possible sickle/scythe blade, possible *lorica* fragment) will be stabilised prior to their submission to the Treasure Trove system.

5 PALAEOENVIRONMENTAL EVIDENCE

- 5.1.1 Four bulk environmental samples were processed by standard flotation methods – the flot retained on a 0.5mm mesh and the residues fractionated into 5.6mm, 2mm and 1mm fractions and dried. The coarse fractions (>5.6 mm) were sorted, weighed and discarded. The flots were scanned under a x10-x30 stereo-binocular microscope and presence of charred remains quantified, to record the preservation and nature of the charred plant and charcoal remains (**Table 2**). The flots had little rooty material and so, from an archaeobotanical perspective, come from secure contexts with less chance of mixing. All the flots were reasonably large in relation to the size of the samples with well-preserved material in them.

5.2 Charred plant remains and charcoal

- 5.2.1 The samples all contained charred plant macros which were often well preserved and sometimes in large quantities. There were some distinct differences between the samples, possibly reflecting different activities in the different areas of the fort.

Trench 1, context 117

- 5.2.2 The layer of burning (117) behind the defences contained a large amount of wood charcoal and frequent smaller stems either from smaller woody shrubs or larger herbs. No cereal remains were present, but a few weed seeds were recovered – cleavers (*Galium aparine*), thistle (*Cirsium/Carduus* sp.), spikerush (*Eleocharis palustris*) and a small grass seed of possible meadow foxtail (*Alopecurus* sp.) or hairgrass (*Deschampsia* sp.) type.

Trench 2, context 204

- 5.2.3 The layer (204), that included burnt clay, overlying the features in Trench 2 was dominated by wood charcoal and had pieces of branch and twig wood present. It also contained 11 broad bean seeds (*Vicia faba*), a single seed of probable beetroot (*Beta vulgaris*) and three grains of hulled barley (*Hordeum vulgare*). There were also oats (*Avena* sp.) and large lumps of parenchyma material, possibly burnt dung from daub.
- 5.2.4 Charred seeds of beetroot have been recovered from other Roman sites, such as Alchester (Moffett 1988). The fact that the seeds were found suggests that the plant was being cultivated, but whether this was for the root (beetroot, sugar beet) or for the leaf (beet spinach, chard) can not be distinguished from the seed alone. Waterlogged bean testas were recovered from the Antonine Fort at Bearsden (Dickson 1989).

Trench 8, contexts 813 and 819

- 5.2.5 Two samples from the midden deposit had large amounts of probable spelt wheat (*Triticum spelta*) grain, several of which had germinated. Only a few

glume bases were recovered and all were spelt wheat. There were also several grains of hulled barley (*Hordeum vulgare sl*) and oats (*Avena sp.*); given the large size of the latter these may have been of the domesticated variety, but no floret bases were seen. A few grains resembling free-threshing wheat were also noted. The relatively high quantity of cereal grain in these samples may indicate the proximity of granaries. The only other food remains present were numerous fragments of hazelnut (*Corylus avellana*).

- 5.2.6 Spelt as a crop is relatively scarce on non-military sites in Scotland, but is well represented at forts along the Antonine Wall, such as Bearsden, Castlecary and Rough Castle (Dickson and Dickson 2000). It also predominated at the Roman fort at South Shields (van der Veen 1992) and is the dominant cereal at many Roman settlements throughout Britain.
- 5.2.7 Despite the exceptional preservation conditions chaff was rare within the samples, and there were no spikelets or spikelet forks, suggesting that the grain was charred after it had been dehusked. It is probable that the sample derives from grain stored, perhaps within the building, in a dehusked state. However, whether the grain was dehusked *en masse* within the fort or arrived already dehusked is impossible to tell from so few samples. The samples from South Shields also produced high quantities of grain, with few chaff remains, suggesting the charring of fully processed crops (van der Veen 1992, 86). This raises the possibility that crops were dehusked before they arrived at such forts and hence entered them as fully processed grain, in contrast to many native settlements where they were stored as spikelets (Stevens 2003).
- 5.2.8 Germinated grains have been observed on several other Roman sites (Hillman 1982) where it has been suggested that it resulted from their having been malted in preparation for beer. However, if dehusked crops were being transported over long distance, it is possible that germination may have resulted from poor storage conditions.
- 5.2.9 Weed seeds were relatively rare in the midden deposit. One large seed resembled *Geranium sp.*, not a species that is commonly found in Iron Age or Roman Britain, but which would be significant if it proved to be non-native, suggesting the importation of the crop. The only other wild species seeds were a probable seed of brome grass (*Bromus sp.*), and a small unidentified grass seed. The sample contained many monocot and probable grass stems, some of the stems being impressed and present within vitrified or parenchymous (soft plant tissue) material. These might derive from dung/daub, straw on the floor, or even possibly a thatched roof.
- 5.2.10 While the sample from the midden deposit contained a large amount of charcoal, much of it was parenchyma, non-vascular material or possible green wood that was not identifiable. However, some large fragments were present which were ring-porous and so representative of oak wood (*Quercus sp.*). Oak is often seen as the preferred building material of the Romans, and a decline in oak around the Antonine Wall has been associated with its construction (Dickson and Dickson 2000). It has been found at other forts

where a range of species was also recorded (Barber 1981, Brett 1964, Dickson 1981, Dickson and Cartwright 1989, Tylecote 1980).

6 DISCUSSION

- 6.1.1 The evaluation achieved its stated aims, providing valuable information about the historical context of the fort, as well as the nature of its development and abandonment. It has refined the earlier understanding of its defences, its internal layout and the character and extent of the adjacent annexe, and allowed some inferences to be made about the character of the military forces that built and occupied it.
- 6.1.2 The fort occupies a prominent and strategic position overlooking River Nith, the valley providing one of the main communication routes through south-west Scotland. The Roman road from the south along the east bank of the Nith has been traced from air photographs at a number of locations, and somewhere opposite Drumlanrig it turns north-north-east towards the fort at Crawford and the Clyde valley (**Fig. 1**). The branch road to the fort, however, probably forded the river below it, and the fact that the fort faced towards the north-west suggests that this may have continued up Nithsdale, past the Roman fortlet at Sanquhar, heading for Ayrshire and the Antonine Wall.
- 6.1.3 No firm evidence was found of Flavian occupation on the site, although the evaluation was limited both in its scope and in the time available to investigate possible earlier phases. There is, however, evidence for two possible phases of construction of the *principia*, whilst the possibility of two phases of rampart in Trench 1 cannot be discounted. No evidence was found for an early defensive ditch, although because the lower levels of the defensive ditch were excavated by machine it is possible that Flavian pottery was overlooked. According to Maxwell and Wilson (1987, 19), the main feature that suggests such a Flavian date for the fort is the possible ‘parrot’s beak’ terminal of the two outermost ditches at the south entrance, visible in the air photographs, and although this feature could not be verified, geophysical survey confirmed the existence of an annexe of late first century for at the fort’s south eastern angle. There was a Flavian fort in Nithsdale, however, 16km to the south at Dalswinton (replaced in the Antonine period by a fort 5km to its south east at Carzield). Elsewhere, notably at Newstead, Birrens Castledykes, Crawford and Loudoun Hill, Antonine forts were built on the site of earlier Flavian forts. Given the identification of two phases of occupation within the *principia*, and the possibility of an earlier phase of rampart construction indicating extensive reconstruction within the Antonine period, the possibility of an earlier, as yet unrecognised, Flavian phase of activity at Drumlanrig, being almost totally obscured, as at Crawford, cannot be discounted (Maxwell, pers. comm.).
- 6.1.4 No excavation was undertaken in the area of the probable annexe suggested by the parch-marks and geophysical data to the north-east, outside the fort’s main defences. Such a secondary enclosure might be expected to have contained workshops, a bath house, shrines and other structures. The fort’s defences appear to have conformed to the standard pattern, with V-section

ditches and a turf rampart underpinned by stone kerbs or cradling to the front and rear.

- 6.1.5 The layout of the fort interior, as indicated by the parch-marks and confirmed by the geophysical survey, also conformed to the largely standard template. It comprised the *principia* and other buildings in the *latera praetorii* to the south-east, and six transverse blocks, probably occupied by the garrison's barracks, in the *praetentura*.
- 6.1.6 The internal *insulae*, at *c.* 35m long, implying barracks some 30m long, are smaller than standard. Maxwell and Wilson (1987, 22) suggested that the fort might have been intended to accommodate only part of an auxiliary regiment, the rest perhaps being stationed in adjacent fortlets along Nithsdale and the adjacent valleys, as at Durisdeer, Sanquhar, Kirkland and Barburgh Mill. The possibility that the garrison included a mounted component is hinted at by the harness fitting found in Trench 11, and by the stone-lined feature in front of the *principia* provisionally interpreted as a cistern or water trough; such evidence, however, is far from conclusive. Additionally the revision of the estimate of overall size facilitated by the geophysical survey makes it more likely that the garrison comprised elements from two different regiments.
- 6.1.7 While the geophysical data revealed the general position of the *principia* and the general configuration of the buildings and streets in the south-eastern part of the fort, their precise locations and dimensions remain unclear. While one would expect the *praetorium*, the substantial commander's house, to be sited next to the *principia*, its location is not clear from the geophysical survey. In addition, it is uncertain whether there was a *retentura* separate from the *latera praetorii*.
- 6.1.8 There was insufficient evidence to establish the methods of construction of the different buildings. One would expect the main buildings to have been built of stone, although the only surviving wall was in block IV, possibly the foundation of a timber-framed barrack with wattle and daub walls. There was, however, a possible stone step in the *principia*, associated with a post setting, possibly from the courtyard colonnade, and a number of features have been interpreted as robbed wall trenches. There was also much stone rubble in the demolition layers. Beam slots were also recorded in the area of the *principia*, but it is unclear how they would relate to the structure of that building.
- 6.1.9 Apart from Trenches 5 and 8, where there was some evidence for more than one phase of construction within the fort itself, the only other clear phase of activity related to the deliberate destruction of the fort prior to its abandonment. Evidence for this can be seen in the high charcoal and burnt clay content of an overlying destruction layer in many trenches, the robbing of wall trenches in the *latera praetorii*, and the possible flattening of the defences including the spreading of turves from the bank into the ditch.
- 6.1.10 The assemblage of finds was small, with datable finds being restricted largely to the pottery. However, these have provided valuable chronological

evidence for the period of use of the fort. A few other artefacts (such as vessel glass and metal objects) can also be related to the fort's occupation, while CBM, stone and nails provide limited evidence for the structure itself.

- 6.1.11 Charred material recovered from samples taken from this evaluation exercise have the potential to inform discussion on the chronology of the occupation, and in particular the abandonment of the fort, through scientific dating methods such as C14 dating.
- 6.1.12 The evaluation has indicated a high level of archaeological survival across the fort, with wall foundations, floor surfaces and road surfaces surviving *in situ*, as well as below-ground features and above-ground elements of the ramparts. Apart from a low level of ploughing, possibly in the medieval period, the main impact on the fort appears to have been the process of deliberate demolition and destruction by the Roman troops themselves when they abandoned the fort.

7 RECOMMENDATIONS

- 7.1.1 In order to more fully understand the fort a number of areas could be the focus for future research. These include establishing the form and extent of the *principia*, locating the praetorium, ascertaining the nature of the structures immediately inside the defences in the *latera praetorii*, and establishing whether there was a rear entrance to the fort (although the topography of the site makes the latter seem unlikely). A programme of scientific dating could be undertaken to establish specific aims, and in particular confirm the date of the destruction of the fort.
- 7.1.2 It is not clear from this evaluation exercise whether the fort at Drumlanrig was first built in the Flavian period. This possibility can only be determined by further excavation targeting areas thought likely to produce firm evidence for such an earlier phase of activity, notably by complete sections of the defences.
- 7.1.3 In addition, research should seek to determine the character of the annexe to the north-east and the types of activities undertaken within it. It seems most likely that the Roman road from lower Nithsdale probably entered the fort through its east gate, and departed through the north, as suggested by aerial photographs. Further work examining the courses of the roads leading to and from the fort would help establish the precise course of the Nithsdale road within the immediate vicinity of the fort.
- 7.1.4 A brief summary of the evaluation has been lodged *with Discovery and Excavation in Scotland 2004*. Copies of this report will be submitted to Historic Scotland, the National Monuments Record of Scotland, the Dumfries and Galloway Council Sites and Monuments Record and to Buccleuch Estates. In view of the significance of these results, it is recommended that a short note outlining the results of this evaluation is published in *Britannia* in the journal's roundup of fieldwork in 2004. It is

also intended to prepare a short report for inclusion in the Transactions of the Dumfriesshire & Galloway Natural History and Antiquarian Society.

8 ARCHIVE

- 8.1.1 The archive, which includes all artefacts, written, drawn and photographic records relating directly to the investigation undertaken, is currently held at the offices of Wessex Archaeology under the site code DRUM 04 and Wessex Archaeology project no. 55755. The paper archive is contained in one lever arch file. In due course, Time Team will transfer ownership of the archive to the National Monuments Record for Scotland.

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Material / Trench	1	2	3	4	5	6	7	8	9	10	11	12	Total
Pottery: Roman	9/30	11/72	7/90	-	-	1/3	5/481	41/588	2/37	4/35	1/3	-	81/1339
medieval	-	-	-	-	-	-	2/15	-	-	-	-	-	2/15
CBM	-	4/153	12/111	-	-	-	1/1	1/5	-	2/17	-	-	20/287
Fired clay	15/51	9/358	10/34	-	-	-	6/309	34/1047	-	-	1/23	-	75/1822
Stone	-	1/1335*	-	-	-	-	2/680	1/45	-	-	-	-	4/2060
Glass	1/2	-	-	-	-	-	-	-	-	-	-	-	1/2
Slag	-	-	2/202	-	-	-	-	3/11	-	-	-	-	5/213
Animal bone	1/1	-	1/1	-	1/1	-	-	-	-	-	-	-	3/3
Metalwork: iron	7	16	-	1	7	-	2	22	6	9	4	-	74
lead	3	-	-	-	-	-	2	-	-	-	-	-	5
copper alloy	-	1	-	-	-	-	-	-	-	1	1	-	3

* does not include quern stone

Table 1: Finds totals (number/weight in grams) by material type and trench

Tr.	Feature	Sample			Flot					Residue Analysis			
		Cont.	Sample size (l)	Flot size (ml)	Root %	Grain	Chaff	Weed seeds uncharred	Charcoal >5.6mm	Other	Charcoal >5.6mm	Analysis	
1	Layer	117	2	3	100	10	-	-	-	A*	-	-	C
2	Layer	204	1	10	700	5	C	-	A	A**	P/B (A)	-	P C
8	Beamslot 812	813	3	7	450	5	A**	B	-	A*	B	-	P
		819	4	2	30	30	A	-	C	C	C	-	-

KEY: A** = exceptional, A* = 30+ items, A = ≥10 items, B = 9 - 5 items, C = < 5 items

Table 2: Assessment of the charred plant remains and charcoal



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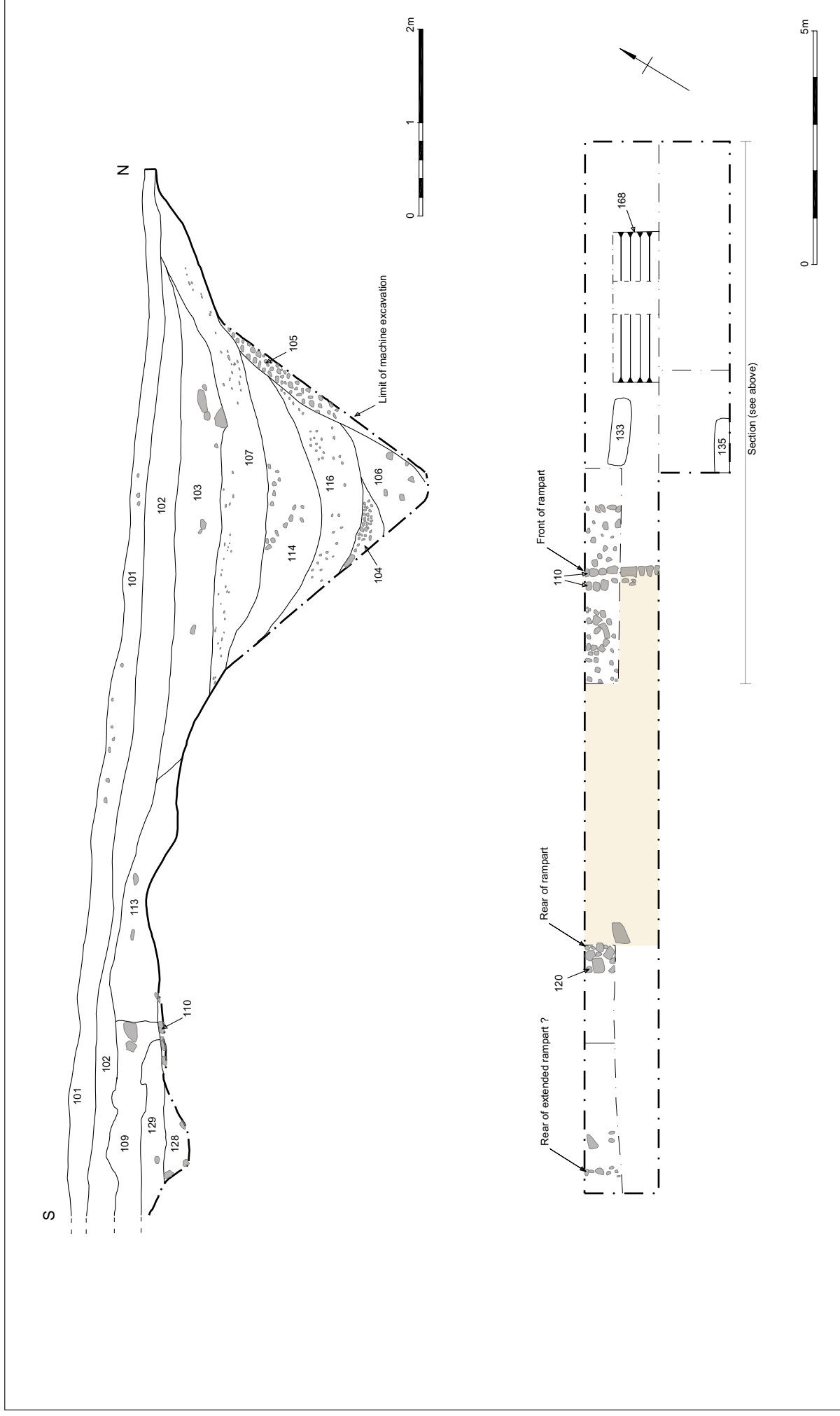


Trenches



Geophysical survey plot and trench locations, with schematic layout of generic Roman fort

Figure 2

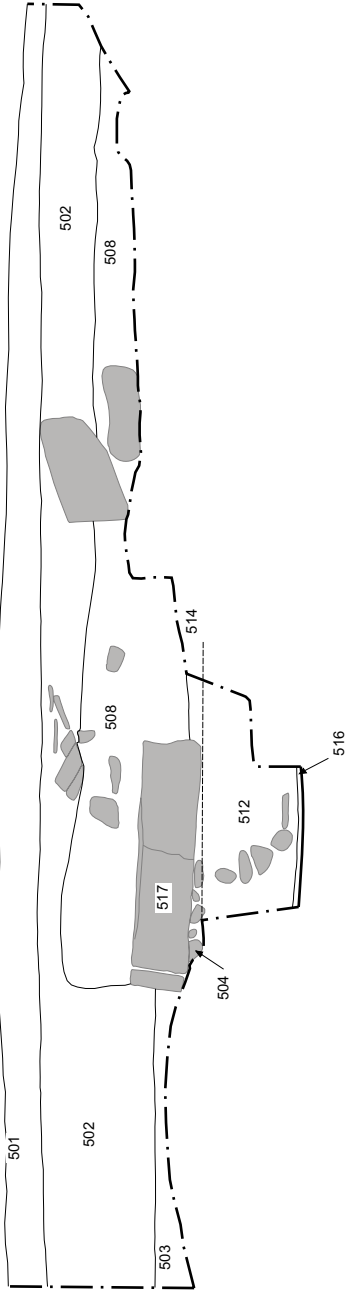


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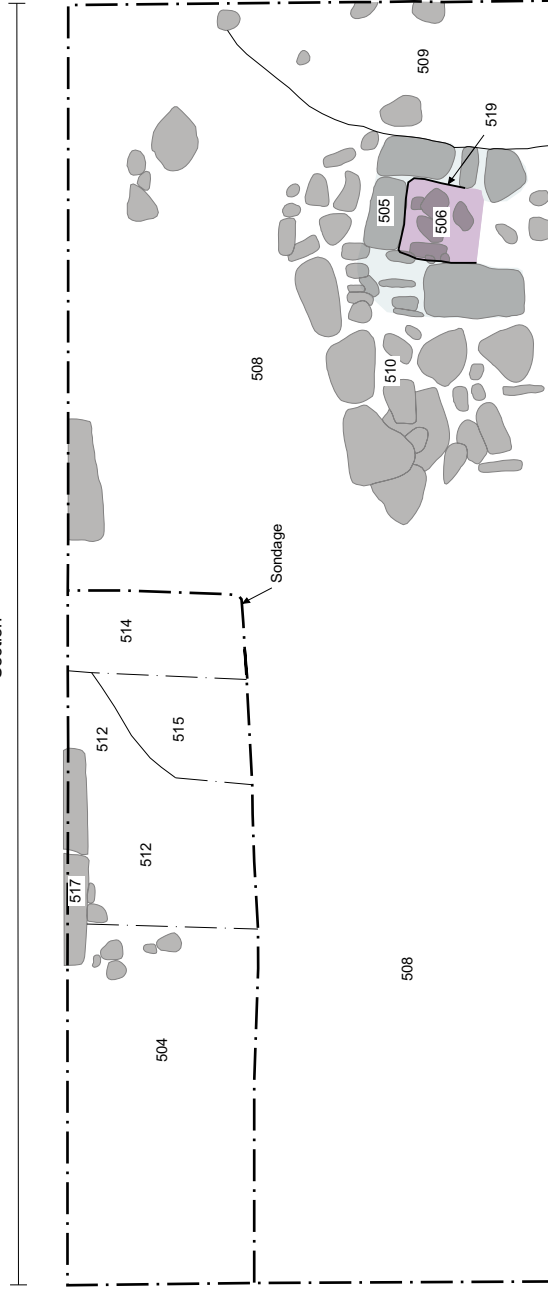
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SE

NW



Section



--- Limit of excavation

█ Stones / Pebble

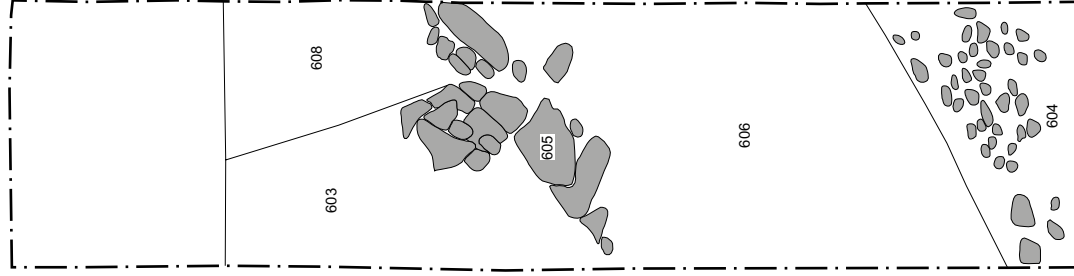
█ Stone setting

█ Socket

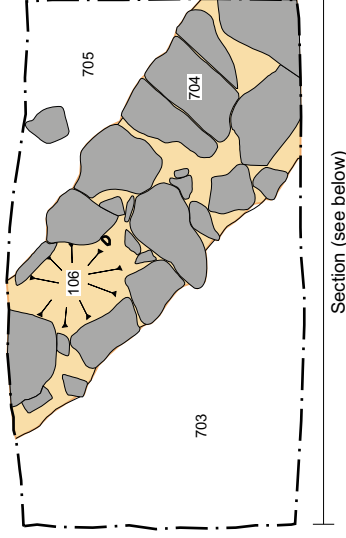
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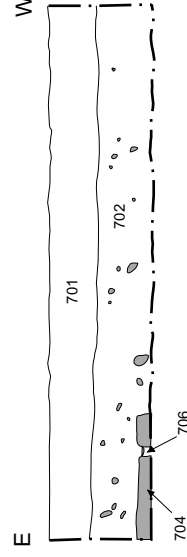
Trench 6



Trench 7



Section (see below)



Stones



Limit of Excavation



Bonding material



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